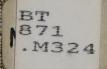
A Scientific Homily on the Resurrection

George Macloskie



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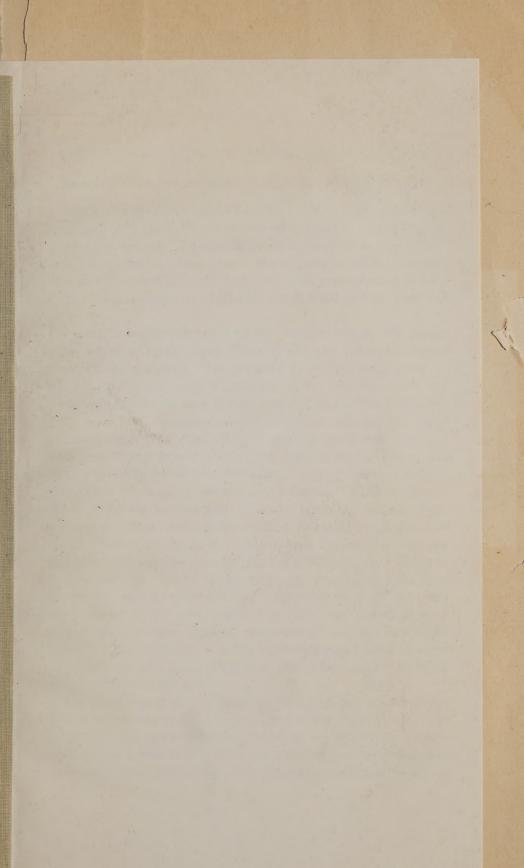
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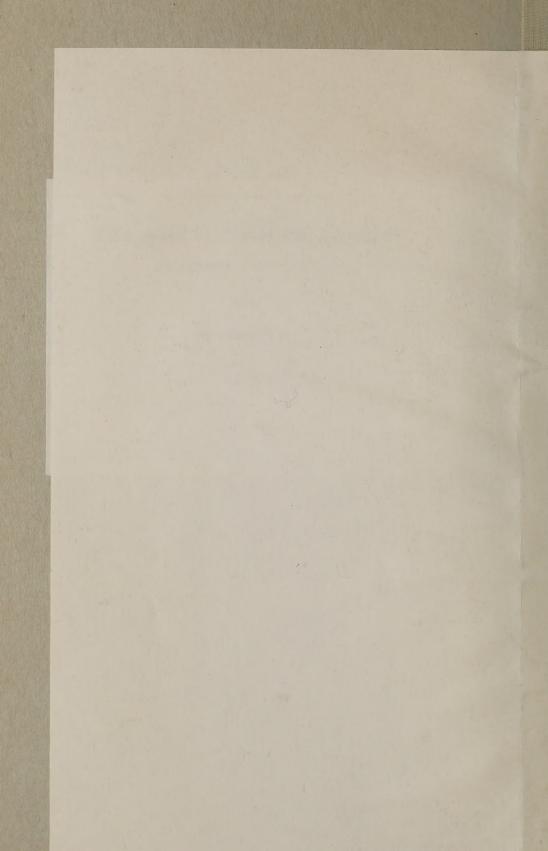
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## A SCIENTIFIC HOMILY ON THE RESURRECTION.

PROFESSOR GEO. MACLOSKIE, LL. D., D. SC., PRINCETON, N. J.

Opposition to the doctrine of a future life was not born of science, but came from the ancient Greeks, some of whom did not admire the scenery of Hades with its dark river and ferryman, and terror-stricken passengers. The objections were elaborated afterwards by the Latin poet Lucretius, who wrote about a century before Paul preached on Mars Hill about Jesus and the resurrection.

Lucretius honestly informs us that his aim was to free people from a fear of what might follow death, and hence he argued that nothing followed. He presents us with a long array of proofs, forcibly put, and in charming style: says that mind and soul, being matter of very fine constitution, are at death changed into vapor and dissipated; that the soul is just like the body, growing along with it, maturing, becoming feeble with age, and ultimately dving with the body; also subject during life to diseases like the body; and he challenges us to say, when a body is cut up into mince-meat, whether every fragment shall contain its share of the fragmented soul. He also poses us with the query whether a soul can be transplanted from one body to another. A recent French author of the same school, informs us that the argument of Lucretius is so complete that little has been added to it since his time; and he is pleased to add that it has never been answered. But he also adds that the Apostle Paul did not teach the doctrine of the resurrection, justifying this statement by a distinction between a "natural resurrection" and one "by God's grace." This is almost as subtle as the argument of one of our own brethren, who makes Paul teach not a resurrection of, but a resurrection from the body.

The chief reason why in modern times, objections to both the doctrines of immortality of the soul, and of the bodily resurrection have been regarded as scientific, is that in our age every problem tries to don a scientific garb. Furthermore, mental phenomena have come into close touch with physiology, and the theory of

evolution at first tended to bring us closer to the lower creatures. Men argued that if death ends all for my dog, why not for me? The same theory of evolution is now replying to such a query, by showing that our fitness for immortality is our most distinctive characteristic. As it is not right, however, to rest our religious hopes merely on scientific deductions, we must look to the more sure word of prophecy. Nevertheless it is pleasant to find confirmations from the same science that furnished the weapons against our faith in a hereafter.

I. The question of Immortality.

It was the doctrine of the immortality of the soul, not of the resurrection of the body, which exercised the ancient Greeks and Lucretius. Their attention seems not to have been called to the bodily resurrection, though, this, as has been shown by Professor Howard Osgood,\* was held from very remote times by the ancient Egyptians; and by the Hebrews, long before the Christian Era.

Lucretius started the problem which is still exercising the specialists, as to the relation of mind and body. At one end of the scale are those who believe in a divinely created soul dwelling within the body, and able to survive the body; at the other end are sensationalists, who repudiate everything that transcends sense-experience: and there are midway-men. The sensationalists have almost succeeded in eliminating the term soul from the contemporary philosophical vocabulary: and they aim to reduce vitality and even mind to the category of inter-convertible materialistic energies. Their difficulty arises from the limitations of science, so that whilst science comes into very close relations with life and mind, it is unable to use any verifications or tests of a higher order than the physico-chemical. In the present state of human knowledge all that can be experimentally tested is the materialistic part: and some people forget that there is any part of a different order. Verifications are all physico-chemical, whilst in science unverified notions are of small account.

But there is a reaction as to the theory of life; and still more as to mind and the conscious soul. Dr. Burdon Sanderson, the leading English physiologist, called attention ten years ago to the change of view as to life; and Alfred Binet maintains that the materialistic view has been refuted, and that vitalism, not as a

<sup>\*</sup>Bibliotheca Sacra, 1902, p. 409.

force superadded to other forces, but as something sui generis, is now established. The trend of view in favor of mind as an entity, is shown especially by some philosophers. Thanks to Miss Ingersoll, and the lectures which she has instituted, and the first three lecturers of the course, William James, and Josiah Royce and the late John Fiske; and also to the Lowell Lectures of Newman Smith, which wind up with an able defence of the doctrine; and to papers by Lyman Abbott and others; we have signs that men of different religious schools are making their way through science to faith. It is stated that there are now scarcely half as many sceptics on this subject as there were fifty years ago, at least among the learned professions. Thoughtful men are discovering that the hope of immortality is reasonable; thus far they are being led by scientific and philosophical presumptions; and they are also beginning to see that after all the scripture is deserving of attention.

The reaction has not only gone in favor of acknowledging human consciousness as an entity; but it is arguing for the recognition of psychical elements amongst the lowest creatures, and of teleological factors everywhere in the organic world; also for teleology in every world, over the universe. It is not for religion that men are fighting this battle; but the philosophers need it for their philosophy, and the physiologists find that they cannot get along without design as a factor in animal and vegetable organisms. I see that Vogt is quoted as stating that physiology pronounces against immortality; but just now physiology is going ahead in opening up new views of life, and it is showing design everywhere; and the step from teleology in the world to immortality for man is very easy. Sachs the vegetable physiologist, himself strong in favor of evolution, remonstrated against the fanaticism of the evolutionists who refused to acknowledge design in the life of plants.

Sachs indeed insisted that even a mechanical explanation of living forces is not a low explanation. But John Fiske has proved that at any rate, if exclusively applied, it is not a true explanation. He urges that thought and the phenomena of the soul absolutely refuse to take their place in the cycle of purely phyico-chemical functions. Other activities of our constitution as light, heat, electricity, muscular energy, and even ordinary nervous ac-

tivities, may be correlated, and so can be compared quantitatively. When one kind of these orders is transformed into another, equivalents result, which are measurable, and show neither loss or gain in the sum-total. But thought cannot be quantitatively compared with any of them, or with any other function of the body. Who can give the equivalent in millionths of a foot-pound, or of a calory, of a burst of emotion, of a flash of genius, or of the heroic part of a man's activity? or show the quantitative unit that will measure consciousness in terms of nervous vibrations? Psychological activities are external to, though always closely associated with the nervous circuit; it is not the thought, but the nerve action accompanying and subserving the thought, that is convertible into motion. Fiske's conclusion is that the Infinite and Eternal Power which animates the universe must be psychical, and that the only sort of monism that is possible is monotheism.

He has also shown that the difficulties in the way of this doctrine are such as might be expected, and he indicates where the real puzzle lies. The great objection depends on the fact that we cannot conceive of the survival of our conscious activity apart from present material conditions; because in actual experience there is no foundation for believing that we can live out of the body.

But he demonstrates that this argument is of no value whatever in the case under discussion, not even raising a presumption. The limitations of our present experience reduce its value to zero. He thinks that there are, in all probability, immense regions of other existences beyond the sphere of our experience, regarding whose reality we have no organs of perception. Even if we were close to them we could never know of their proximity, or existence. He cites by way of illustration, the "critical" points of mathematics and physics, to which some process moves on with perfect regularity, till it comes to an obstable that threatens to bar its progress; yet it jumps over the obstacle with ease, and we are unable to tell how the feat was performed. The want of testimony about immortality is of no account, since we have never been able to search for it in the only place where it could possibly be found.

On the problem of mind and body, Professor James advocates what he terms a "transmission theory," which, regarding the

mind as in a measure independent of the organism, compares its activities with those of the keys of an organ, which are connected with, but distinct from the mechanism that drives the wind, and vet these keys control the wind-passage, so as to give the right music. The distinction of the mind from the nervous mechanism he favors, as connecting mind with transcendentalism, and as being in touch with spiritual phenomena, some of which at least appear to be genuine, and cannot otherwise be easily explained. Citing Kant's remark that death may end the sensational, and may start the higher activities of the mind, he upholds a dualism, mental parts being one kind, and physical parts being another kind of stuff. He thinks that consciousness may have pre-existed brain as an entity, and may receive special form from the brain; though during life it may receive ideas from the unseen world, yet death may clarify its vision. In the future life he argues that we are to retain our personal peculiarities as part of our identity, so that a man will be able to say "I am the same person who in old times on earth had these experiences."

The representation of Professor Royce arrives at the same result by the route of metaphysics. He argues that man can never during his earthly existence satisfactorily experience or even understand his own personal individuality. All that we learn of it in this world is fragmentary and deceptive. And if we are ever to know ourselves, or to be known, we must pass hence into another existence, into closer relation with the very life of God. Royce's teleological conception of the universe, as dominated by order and design and goodness, causes him to maintain that we shall thus pass into the presence of God, and so realize ourselves. It was in the same spirit that James Martineau declared that no man will deny immortality who has an idea of his own fitness for that destiny; and James Sully, after fighting vigorously against the pessimists in favor of faith in this world's progress, confesses heartily that even his hopes of improvement here are no sufficient substitute for the happiness promised by religion. We commend this last remark to Dr. Paul Carus, who after praising belief in immortality as "of paramount importance because it is a moral motive," immediately tries to condemn it as a pious fraud, and would resurrect and urge on our acceptance the obsolete fiction that men, dead in soul as well as body, can still enjoy a quasiimmortality because of the good they have done. If death will end me, soul and body, it will be small favor to the unconscious ashes what the world may think about their former owner.

II. The Resurrection-body.

The spectacular aspect of the resurrection and of the day of judgment need not be applied literally, any more than the fire and chains of hell, and the harps and crowns and palms of heaven. Francis Turrettin, prince of the divines of the seventeenth century, and Francis L. Patton, who is also a prince of our own, renounce literalism in these last parts; Patton adding the wholesome caveat that we must not divest future punishments of their terrible significancy. In this he has the able support of a man of a different school; for Huxley insisted that evil ought to be punished "not only in the present, but in all the future a man can have, be it long or short." It is only the weaklings and "the doers of certain kinds of actions" (Huxley's phrase), who fight against hell. But people too often forget that the denunciations of Scripture are primarily messages of mercy, sent to draw men to seek deliverance.

Whilst Christians know that the real inwardness of the representations of the Word of God on these questions must be true: they are well aware that it is impossible for us to present this inwardness in such language as would be an improvement on the picturesque delineations with which God has pleased to introduce them to our attention. Language cannot describe remote conditions so as to preclude confusion and misapprehension; and it is safe to say that if ever we reach heaven we shall find a great many surprises, though no disappointments.

Perhaps the simplest presentation is safest for the scientific age in which we live. When submitting to serious surgical operations, we felt ourselves face to face with these problems: and our alternatives were that either we should awake again, in this world, and in the body, and this in a few hours and surrounded by friends: or that we should awake in another world and also amidst friends, after a few hours, or perhaps after a few millenniums, which would be to our consciousness only as an instant, and in that event whether we should be in the body or out of the body we did not know, or greatly care. We thought that the awaking would be probably in either case a quiet affair, as from a sound

sleep. The main question was whether we could trust God for both soul and body.

Whilst the question is one of pure revelation, it is proper to appeal to reason, especially to physiology, because that science is sometimes cited as an opposing witness.

In recent years a great deal of light has come in this way; which may be here indicated, though it cannot be profitably discussed. The general result is to make the resurrection conceivable as a possibility, when regarded from science. This is, we think, a gain: but it does not signify that we can formulate a theory as to how the event will probably occur.

All such physiological investigations are initiated by experiments on the lower forms of animals and plants. Specialists experiment on the rejuvenescence, and on what they call the immortality of the micro-organisms: on processes of encystment, by which a seed or an animal germ may remain asleep, for an indefinite period, to revive under proper conditions of moisture and temperature; and after all this experience it shall retain its essential characters, usually improved, and its "personal identity." The long gap between now and the resurrection is thus potentially filled. With our Saviour the gap was very short; but even he had to pass through all the stages of reorganization of the body, and through transformations which are necessary to fit it for the new environment.

So far as science may speak, no absolute break in the organism can be tolerated, no substituting of a newly formed and independent body for the old body. This would destroy the identity, so fas as we know, of soul and body. But the identity of organization may persist in spite of constant change of the chemical constituents of the organism: just as Niagara Falls have maintained their identity since the time of Father Hennepin, though the water is momentarily changing, and even the rocks are different.

Still more the material carrier of the personal identity may be very minute: not needing a resurrection bone, nor even a pineal gland to be the soul-vehicle. When Turrettin said that all that is necessary is the preservation of the essential part of our body, he was more correct than he understood. The essential part may be a germ, smaller than that in the seed of a plant: or may be only a cell: or merely a cell-nucleus: or perhaps a few of the mysteri-

ous nuclear-loops: or, for anything known to science, only a few molecules of living matter, too small for vision under the best possible microscopic appliances. We have calculated that there are more than twenty thousand molecules of living protoplasm in the smallest particle that the human eye will ever be able to see with microscopic help: which shows a broad margin of possibilities in the direction of organic identity.

Physiological investigation has recently brought into notice a sort of machinery which has baffled ourselves to imitate, and which can be daily observed by us in tiny plants and animals. This is a machine for reversing reactions. Man has not got such a machine, and has been unable to understand the mode of its working, —for example the activity of ferments. Professor Loeb has lately found how to imitate a particular case of its operation. discovered in starfishes that the death of eggs is counteracted by fertilisation, he also found that certain chemicals would do the same, and thus save the eggs from dying. And he argues that in higher forms, with ourselves for example, there comes with age a critical period which ends in death: but he thinks that there is no absolute reason why we should ever die: and he recommends experiments for counteracting our death. The experiments may well be made, though we will not be very sanguine as to the result: but all this is helping us to think of immortality as not inconceivable.

The reversing system of nature carries us further than a means of arresting decay and death. It is making old things young again. Rejuvenescence, the word and the process, is in the air. Carry out the process and you will see that it may compel the grave, even the watery grave in the ocean, to give up the dead. Let the disintegrating process be reversed so as to become redintegrating and aggregating. Not the very chemical particles, but the organization may be restored, which alone is necessary for bodily identity. This will give us not Ezekiel's vision of the bones and sinews and flesh and skin: but the old body must reappear in a new shape, historically continuous with the original, but metamorphosed as all organisms must be for a new environment. We do not know what sort of body is adapted to heavenly life: but if we are to be along with angels, who are termed spirits, it is very convenient for the apostle to call it a spiritual body, whilst

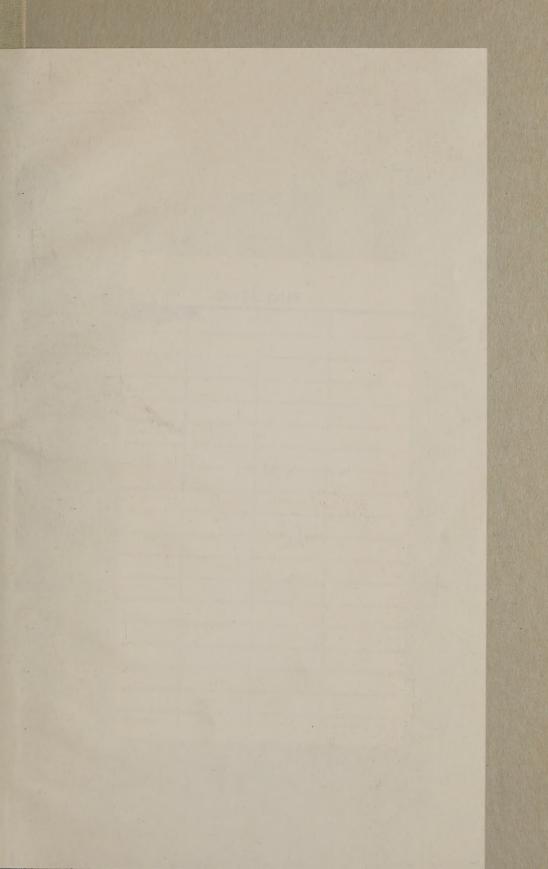
stating that he cannot particularly inform us of its nature. What or where it is to be, what we are to understand by the "new heavens and the new earth wherein dwelleth righteousness" we know not. Yet there is no scientific puzzle in these matters. An eminent physicist, still living, once broached a dream of the beginning of life on earth by immigration hither of germs from other parts of God's great universe: wherefore may we not dream of the renovated and transformed bodies passing hence to be with God, in whatever part he is pleased most to manifest his goodness?

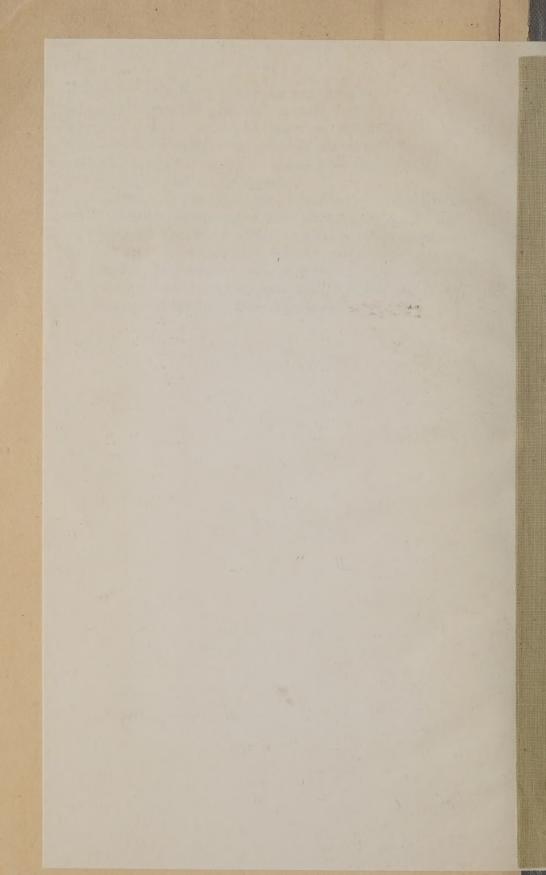
III. Psychological Continuity.

The question remains whether this view will meet the requirements of thought as well as of mere vitalism. For light on this point I am indebted to my friend Prof. A. T. Ormond.

Psychology maintains that our personal identity as thinking selves does not involve continuity in time. There come gaps in which memory and consciousness are inactive. These gaps may continue for short or long periods, for a few minutes or hours, or, for anght we know, they may last for thousands of ages. length of the intervals makes no difference as to the identity of the consciousness after it resumes its activity. Since such gaps are not inconsistent with the continued identity of the consciousness, they do not in any respect imperil the integrity of the self. What maintains the personal identity is the possibility of revival of the conscious memory. And this may occur if there is only a single fibre of common contact, to join the old and the new activity of consciousness, or if there is only a solitary particle, serving to re-establish the continuity, as a basis for consciousness and memory. A single granule, possibly a chemical molecule, at all events a very small portion of the nuclear matter of a single cell, would suffice for the organism, to start the process of self-restoration. Embryology appears to point to the loops of the dividing nucleus, as having the office of perpetuating identity as well as heredity. Of course if a thousand of these were to remain from a single conscious individual, each one would suffice to uphold all the rights and titles of the complete soul, not as a thousand identities, nor yet as a thousand subdivisions of one fragmented personality, but as all shouting in chorus for the long life of the one indefeasible identity. The fact that each individually, and all the protoplasmic units collectively, bring up the one only consciousness to which they all belong, testifies not only to their lasting loyalty to consciousness as their superior lord: but to the unity of the consciousness, and to the independent entity of the soul, which they all recognize, and which cannot be simply a lot of functional, and hence divisible, parts of the organism.

What would happen if in any particular case not a solitary thread remained to perpetuate a man's pedigree, and to be a starting-point for his revived consciousness, physiological psychology deponeth not. We do not think, however, that the Almighty will feel greatly embarrassed by such a conjuncture, if it can possibly arise; for we know that he has easy ways of unravelling threads that to us would seem hopelessly entangled.





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